

Appl. No. 09/884,957

at least two induction coils wound radially and located on the circuit board, an upper surface of each of the at least two induction coils being in a first plane and a lower surface of each of the at least two induction coils being in a second plane;

a magnetic element having a plurality of magnetic poles arranged in a co-plane fashion and being disposed above the induction coils;

at least two magnetic pins being magnetism conductive and located between the circuit board and the magnetic element, and also being disposed between the induction coils, and becoming magnetized by the magnetic element, upper and lower ends of the at least two magnetic pins being between the first and second planes; and

a controller located on the circuit board and connected electrically to the induction coils for activating the induction coils to form magnetic poles;

wherein the induction coils generate magnetism to become magnetic poles to repulse the magnetic element when electric current flows through the induction coils thereby enabling the magnetic element to generate rotational kinetic energy.

Appl. No. 09/884,957

Please add the following claims:

--14. The D.C. brushless voice-coil motor of claim 1, wherein the at least two magnetic pins have a constant, uniform circumference throughout their length.--

--15. The D.C. brushless voice-coil motor of claim 1, wherein the at least two magnetic pins are cylindrical.--

--16. The D.C. brushless voice-coil motor of claim 1, wherein the at least two magnetic pins have a smooth outer surface.--

--17. The D.C. brushless voice-coil motor of claim 6, wherein the at least two magnetic pins only contact the guard ring.

--18. The D.C. brushless voice-coil motor of claim 6, wherein the guard ring has a generally planar upper surface and a generally planar lower surface and wherein the at least two magnetic pins are received in the guard ring and positioned between the upper and lower surface such that the at least two magnetic pins fail to extend beyond the surfaces of the guard ring.--